

Safety Advisory 2016-03

Mitigation and Investigation of Passenger Rail Human Factor Related Accidents and Operations in Terminals and Stations with Stub End Tracks

SUMMARY: FRA is issuing Safety Advisory 2016–03 to stress to passenger and commuter railroads the importance of taking action to help mitigate human factor accidents, assist in the investigation of such accidents, and enhance the safety of operations in stations and terminals with stub end tracks. This safety advisory contains various recommendations to passenger and commuter railroads related to inward- and outward-facing cameras, sleep apnea, and operating practices to potentially mitigate the occurrence and assist in the investigation of human factor related accidents and to enhance the safety of operations in terminals and stations with stub end tracks.

Recommended Actions

In light of the recent accident discussed above, and in an effort to ensure the safety of the Nation’s railroads, their employees, and the general public, FRA recommends that intercity passenger and commuter railroads do each of the following:

1. Instruct their employees during training classes and safety briefings on the importance of compliance with maximum authorized train speed limits and other speed restrictions when entering passenger stations and terminals;

- Training – Incorporating into Conductor Qualification and Locomotive Engineer Training Programs
- Transportation Rules – This occurs during initial qualification classes, train handling and written exams and during re-certification block training during Rules Reviews and exams.

2. Not less than once every six months evaluate operational testing data as required by 49 CFR 217.9. A railroad should consider increasing the frequency of operational testing where its reviews show any non-compliance with maximum authorized train speeds in passenger stations or terminals. Railroads should conduct a significant number of operational tests on trains required to operate into a station or terminal with stub end tracks;

- Will be checked during next 6 month review as noted
- Mandatory operational tests added for January 2017 SAFER observations as noted

3. Adopt procedures requiring communication between crew members and the locomotive engineer before and during operation into a station or terminal and/or implement technology to appropriately control and/or stop the train short of the stub end track. These actions could include:

a. Making modifications to automatic train control (ATC), cab signal, or other signal systems capable of providing warning and enforcement to ensure trains comply with applicable speed limits and stop short of stub end tracks;

b. If a railroad does not utilize an ATC, cab signal, or other signal system capable of providing warning and enforcement at applicable passenger terminals and stations with stub end tracks platforms (or if a signal system modification would interfere with the implementation of PTC or is otherwise not viable), making all passenger train movements at the identified locations while in communication with a second qualified crew member. This will provide constant communication with the locomotive engineer and allow the second crewmember to take immediate appropriate action if the locomotive

engineer is not responding or is unable to stop short of stub end tracks. This could also include making a safety stop at predetermined location and if the locomotive engineer does not make an appropriate safety stop the second qualified crew member can take appropriate action to stop the train;

- **Transportation – Issued General Notice 2-52 on 01/04/2017 requiring conductor to ride on head end approaching stations with stub end tracks (attachment). Effective immediately GN 2-52 is being covered in all Transportation Training programs.**

4. Review Safety Advisory 2004–04 (69 FR 58995, Oct. 1, 2004); Effect of Sleep Disorders on Safety of Railroad Operations, in its entirety with all operating crews. Recommended actions from Safety Advisory 2004–04 are listed below:

a. Establish training and educational programs to inform employees of the potential for performance impairment as a result of fatigue, sleep loss, sleep deprivation, inadequate sleep quality, and working at odd hours, and document when employees have received the training. Incorporate elements that encourage self-assessment, peer-to-peer communication, and co-worker identification accompanied by policies consistent with these recommendations. The Railroaders' Guide to Healthy Sleep Web site (<http://www.railroadersleep.org>) has several educational resources to assist railroaders in improving their sleep health including an anonymous tool for self-screening for sleep disorders including OSA. This Web site is set up to disseminate educational information to railroad employees and their families about sleep disorders, the relevance of healthy sleep to railroad safety, and provide information about improving the quality of the railroaders' sleep. The Web site was developed in conjunction with the Division of Sleep Medicine at Harvard Medical School, WGBH Educational Foundation, and Volpe— The National Transportation Systems Center;

- **A training module on fatigue is taught to train and engine service personnel during periodic re-certification training and to new employees during initial training**
- **Train and Engine service personnel are told about the FRA website noted above during periodic re-certification training , union publications and on the Corporate Safety Department and Transportation Services websites**

b. Ensure that employees' medical examinations include assessment and screening for possible sleep disorders and other associated medical conditions (including use of appropriate checklists and records). Develop standardized screening tools, or a good practices guide, for the diagnosis, referral and treatment of sleep disorders (especially OSA) and other related medical conditions to be used by company paid or recommended physicians during routine medical examinations; and provide an appropriate list of certified sleep disorder centers and related specialists for referral when necessary;

c. Develop and implement rules that request employees in safety-sensitive positions to voluntarily report any sleep disorder that could incapacitate, or seriously impair, their performance;

d. Develop and implement policies such that, when a railroad becomes aware that an employee in a safety sensitive position has an incapacitating or performance-impairing medical condition related to sleep, the railroad prohibits that employee from performing any safety-sensitive duties until that medical condition appropriately responds to treatment; and

e. Implement policies, procedures, and any necessary agreements to—

i. Promote self-reporting of sleep related medical conditions by protecting the medical confidentiality of that information and protecting the employment relationship, provided that the employee complies with the recommended course of treatment;

ii. Encourage employees with diagnosed sleep disorders to participate in recommended evaluation and treatment; and

iii. Establish dispute resolution mechanisms that rapidly resolve any issues regarding the current fitness of employees who have reported sleep related medical conditions and have cooperated in evaluation and prescribed treatment.



- Metropolitan Transportation Authority (MTA) is currently identifying vendors for an all agency sleep apnea program

5. Accelerate the installation of inward- and outward-facing cameras in passenger trains in the cab of the controlling locomotive or cab car operating compartment per the FAST Act. FRA notes that the FAST Act includes provisions on standards for the cameras, use of the cameras, and preservation and protection of data from the cameras. FRA encourages all intercity passenger and commuter railroads to take actions consistent with the preceding recommendations. FRA acknowledges that action on some of the above recommendations may have already taken place by segments of the industry. If so, FRA recommends railroads review their current programs for relevancy and review the policies and procedures with all their operating employees.

- LIRR will begin installation of inward and outward facing cameras in 2017